## Health Decisions, Inc.

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Notice of Independent Review Decision

October 12, 2015

**IRO CASE #:** 

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:** Left Sacroiliac joint injection radiologic exam, epidurography

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION: American Board Certified Anesthesiologist with experience in Pain management for over 6 years.

## **REVIEW OUTCOME:**

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

□ Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for <u>each</u> of the health care services in dispute.

**PATIENT CLINICAL HISTORY [SUMMARY]:** Patient had a work related injury on xx/xx/xx. She has had chronic back pain since injury. This is a request for Left Sacroiliac joint injection radiologic exam, epidurography.

10/15/13: Pt reports that xxxxxx and injured her back with pain that radiates to the left leg. Pain is burning and is aggravated by sitting and standing and affects ALD's. Pain is decreased by rest and lying. Pt is experiencing numbness and tingling in the L leg.

10/21/13: XR report: Impression No evidence of acute fracture or vertebral body compression. Discogenic spondylosis at T3-4 through T9-10. Discogenic spondylosis and facet arthropathy at L3-4, L4-5 and L5-S1.

11/07/13: MRI report: Reveals a possible adrenal of liver mass/cyst, lymphadenopathy, or paraspinal tumor; no other significant finders were reported

01/02/14: CT results: reveled a liver hemangioma and splenic granuloma

02/18/14: Office note: Pt was released to work on light duty.

02/26/14: Office note: Patient is still having pain with mildly restricted ROM follow up in 2 weeks.

03/11/14: Office note: Still having lumbar pain, Pt reports that she had L SI injection yesterday and is now having headache after injection, Follow up in 1 week. Assessment unchanged.

03/18/14: Office note: Still having lumbar pain and worse with standing, assessment unchanged.

04/15/14: Office note: Pt continues to have pain.

04/29/14: Office note: This patient is a who is seen in pain management consult requested by. The pain acutely developed on xxxxxx. It 5/10 in severity has an achy and shooting quality, it radiates into the leg and groin distribution. The pain has been constant. The patient states the pain is aggravated by bending, standing for long periods of time and walking. Pt reports that the pain is alleviated by rest. She denies any additional symptoms for long periods of time and walking. It is alleviated by rest. Exam: Tenderness over the left lumbar facets. Mildly reduced ROM with mild pain, Gait is normal. Plan: FACET injections-Lumbar single and 2<sup>nd</sup> level. Follow up 2 weeks after injections.

05/14/14: Procedure note: Pre-operative diagnosis- Lower back pain, Lumbar spondylosis. Post-operative diagnosis- Lumbar facet syndrome, Low back pain, Lumbar spondylosis. Procedures performed- Left L4-L5 medial branch block of the primary dorsal rami to the lumbar facets. Fluoroscopic guidance, Interpretation of contrast.

05/20/14: Office note: Pt reports that her pain is the same since last visit. She has been recently treated with lumbar paravertebral facet injections. The Lumbar paravertebral facet was effective for 2 days and she says maybe 25% better. Neuro exam: CN II-XII grossly intact without focal neurological defect no abnormal movements noted, Sensation intact to light touch in extremities bilat. Lumbar spine: tenderness over the left lumbar facets, ROM-mildly reduced mild pain with ROM. Gait normal, muscle tone normal. Plan: PT evaluation and treat, home exercise program

06/06/14: Procedure note: Preoperative and operative diagnosis: Spondylosis, unspecified low back, Lumbar DDD. Procedures performed: Radiofrequency ablation of the branch of the primary dorsal remi of the L4 and L5 nerve roots fluoroscopic guidance, Electrical stimulation guidance prior to rhizotomy.

06/19/14: Office note: Pt reports that ablation was 50% effective. No significant change in assessment. Plan: tramadol 50mg, Narcotic contract reviewed. F/U.

12/08/14: Physical Medicine and Rehab treatment plan: Treatment plan includes therapeutic exercise, Electrical Stimulation, and Myofascial release to reduce pain and spasm and inflammation in order to increase ROM and functional abilities.

09/25/14: Permanent impairment evaluation: On xxxxx presented herself for a final examination and evaluation of her complaints stemming from a work related injury that she was involved in on xxxxxx. Injury description: reported, "xxxxxx. She experienced immediate lower and middle back pain with pain into her left hip and down her left leg." Current complaints: current signs and symptoms were assessed today. Her first symptom is dull and aching pain in the low back on the left side. She reported that the pain radiates into the left hip. It causes serious diminution in her capacity to carry out daily activities. It is aggravated by standing. History: indicated that she had not experienced prior symptoms similar to her current complains and was symptom free at the time of the accident onset of xxxxxx General physical exam: Her superficial appearance did not indicate any obvious distress. Minors Sign was not present, tending to rule out sciatica. Her walk revealed no antalgic gait. True Lumbar Flexion- Moderate restriction: norm if 60+. True Lumbar Extension- Severe restriction. Left lateral flexion- Slight restriction. Right lateral flexion-Slight restriction. Neurological evaluation: The heal walk test was negative. The toe walk test was negative. Sensory deficit testing: All lower extremity dermatomes were found to be within normal limits with no loss of sensibility, abnormal sensation or pain noted. The Orthopedic evaluation: Lumbar lesions tests: The low back hyperextension test which is used to localize low back lesions was positive. When asked to point to the center of the pain resulting from the test, pointed to the L1-4. On this test the patient lies prone with the arms at the sides and legs straight and together. The examiner holds the legs down and has the patient lift the head, neck and shoulders as far back as possible. Then the examiner has the patient point to the center of the pain. Sacroiliac Lesion Tests: negative Sciatic Nerve Lesion Test: Negative as both legs could be straight leg raised to 90 degrees without pain. Sciatic Nerve Test:

negative Milgram's test negative, Bechterew's test was negative. Impairment rating: Lumbosacral Category II: Minor Impairment. Whole Person Impairment for Lumbosacral Spine: 5% Total combined Permanent Impairment: 5% of the whole person. Assessment diagnosis: Lumbar Facet Syndrome, Chronic Myospasms of the Lumbar Para vertebral muscles. Closing comments: I hope this A.M.A. Report of Medical Evaluation (Permanent Medical Impairment) cover sheet and Narrative Report are sufficiently representative of the true medically rated loses as suffered by this patient.

05/05/15: Office note: Patient reports that her pain is still the same as last visit. The pain is aching, dull, sharp and shooting, burning, throbbing and pressure like, tightness in quality. The pain radiates to the left knee and she states she has popping in her knee with climbing stairs and some with walking. She did have a Medial branch block and rhyzotomy last year that helped 75% for 8 months but the pain is returning. Pt reports back pain, muscle pain and limitation of motion, CN II-XII grossly intact without focal neurological defect. Pt has tenderness over the left lumbar facets, mildly reduced ROM with mild pain. Plan: Block of medial branch of lumbar spinal nerve, Facet injection Lumbar 2<sup>nd</sup> level. Follow up 2 weeks after procedure,

06/26/15: Procedure note: Pre-operative diagnosis: Low back pain, Lumbar spondylosis. Postoperative diagnosis: Lumbar facet syndrome, Low back pain, and Lumbar spondylosis. Procedure performed: Left L4 and L5 medial branch block of the primary dorsal rami to the lumbar facets, Fluoroscopic Guidance, Interpretation of contrast.

07/13/15: Office note: Pt has recently been treated with lumbar paravertebral facet injection. The lumbar paravertebral facet was 90% effective temporarily. No significant change in assessment. She is still tender and limited ROM. Plan is to proceed with physical therapy and spine rehabilitation. Discussed with patient lumbar radiofrequency ablation under fluoroscopy, the patient wishes to proceed with the procedure.

07/23/15: Office note: Patient has been recently treated with lumbar paravertebral facet injection and diclofenac gel 3%. The lumbar paravertebral facet was 90% effective. Pt has been seen by who recommended proceeding with an SI joint injection under fluoroscopic guidance. She presents today to discuss that option. No significant changes in assessment. was consulted and agrees with pain for SI joint injection and agrees the plan is medically reasonable and necessary.

07/29/15: UR: Based on the clinical information submitted for this review and using the evidenced based, peer-reviewed guidelines referenced above, this request is not-certified. There is a lack of documentation showing that the patient has evidence of sacroiliac joint dysfunction with positive results from the above mentioned diagnostic tests to support the medically necessity of this request. Also, there is lack of evidence that the patient had at least 70 percent pain relief from the prior injection for at least 6 weeks, as well as an objective improvement in function to support the medical necessity of an additional injection.

09/09/15: UR: Based on the clinical information submitted for this review and using the evidence-based, peer-reviewed guidelines referenced above, this request is no-certified. The submitted documentation and imaging studies did not indicate the patient had spondyloarthropathy (sacroliliitis). There was no indication of ankylosing spondylitis, psoriatic arthritis, reactive arthritis, arthritis associated with inflammatory bowel disease, and undifferentiated spondyloarthropathy.

## ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

Based on the clinical information submitted for this review and using the evidenced based, peer-reviewed guidelines referenced above, this request is not-certified. There is a lack of documentation showing that the patient has evidence of sacroiliac joint dysfunction. There is lack of evidence that the patient had at least 70 percent pain relief from the prior injection for at least 6 weeks, as well as an objective improvement in function to support the medical necessity of an additional injection. Therefore, this request is non-certified.

## Per ODG:

Recommend the physical examination diagnostic criteria below as a primary indication of pain related to the sacroiliac joint (based on consensus opinion), with respect to sacroiliac joint pain, sacroiliac complex pain and sacroiliac dysfunction diagnostic signs and symptoms (physical and imaging for non-inflammatory pathology). Not recommend imaging studies for non-inflammatory pathology. Imaging studies are primarily recommended to rule out spondyloarthropathies (sacroiliitis) and other non-sacroiliac pathology. Spondyloarthropathies are classified as ankylosing spondylitis, psoriatic arthritis, reactive arthritis, arthritis associated with inflammatory bowel disease, and undifferentiated inflammatory arthritis. There is no universally accepted gold standard for the diagnosis of low back pain secondary to SI pathology, and in particular, that attributed to the joint itself. Any diagnosis is often confounded due to the presence of other low back pathology (including spinal stenosis and facet arthropathy). (King, 2015)

The concepts of sacroiliac (SI) joint pain, sacroiliac complex pain and sacroiliac dysfunction: Research on pain described in the sacroiliac area is generally described in one of the above three ways. The nomenclature is used somewhat interchangeably in current literature, but as defined below, there are differences between the three. Sacroiliac joint pain: When pain is specifically attributed to the joint it is referred to as SI joint pain. Sacroiliac complex pain: SI complex pain refers to pain from any of the sacroiliac structures (including the joint itself). Recent literature (within the last 15 years) has introduced the idea that presentation varies according to the anatomic region or pathology of the region (anterior, posterior, and/or extra-articular ligaments), and that pain is not necessarily secondary to actual intra-articular joint pathology alone. (See Anatomy below.) Using this concept, it can be noted that SI complex pain is not a discrete entity.

Sacroiliac joint dysfunction: Joint dysfunction in general is described as an arthrokinematic dysfunction in the absence of pathological changes in the joints, including capsules and ligaments. Arthrokinematics describes small amplitude motions of bone at joint surfaces (versus gross movements of bones at joints). In current literature, SI joint dysfunction is often used interchangeably with SI joint pain. When differentiated, SIJ dysfunction generally refers to aberrant position or movement of the SIJ structures that may or may not result in pain, with the knowledge that the range of motion of the SI joint is small. A reference standard for SIJ dysfunction is not available. (Laslett, 2008) (Mennell, 1960)

Degenerative sacroiliitis: Several papers evaluating the iFuse system for percutaneous sacroiliac joint fusion have been published that use a diagnosis of degenerative sacroiliitis. This is defined by the researchers as established SI joint-mediated pain in the context of either radiographic evidence of SI joint degeneration (sclerosis, osteophytes, subchondral cysts, or vacuum phenomenon) on CT or X-rays, or a history of prior lumbar fusion. This definition is not used in any other research literature other than that published on iFuse. As noted above, sacroiliitis is generally a term associated with pathology of the SI joint associated with spondyloarthropathies. (Whang, 2015) See Sacroiliac fusion, Diagnostic criteria for iFuse studies.

Diagnostic physical examination tests to test for sacroiliac joint pathology: The available research on physical exam findings described below indicate they are directed at diagnosing sacroiliac joint pain. It is not known if these tests can reliably identify extra-articular SI joint sources of pain and are not specifically used to diagnose SI joint dysfunction (as described above). (Laslett, 2008) A cluster of pain provocation tests and pain palpation testing of the long dorsal sacroiliac ligament and pubic symphysis is recommended when making a diagnosis of sacroiliac joint pain based on physical examination. Research studies show a fairly high sensitivity and specificity for diagnosing SI joint pathology when at least three of five (and sometimes listed as six) provocation tests are positive on exam (approximately 80% for sensitivity and 90% for specificity, depending on the reference used). Specificity increases in patients whose symptoms cannot be made to move towards the spinal midline (referred to as centralizing, based on a McKenzie assessment of repeated movements). The five tests most recommended include the pelvic distraction test, pelvic compression test, thigh thrust test, FABER (Patrick's test) and Gaenslen's test. The test with the highest reported sensitivity is the thigh thrust test. It should be noted that there is no reference standard for any of these tests and many suffer from low inter-examiner reliability. The studies listed use SI joint infiltration as a comparator. (Simopoulos, 2012) (Szadek, 2009) (Wong, 2012) (Laslett, 2005) (Laslett, 2008) (van der Wurff, 2006) (Cohen, 2013)

<u>Location of pain</u>: Pain may radiate into the buttock, groin and entire ipsilateral lower limb, although if pain is present above L5, it is generally not thought to be from the SI joint. (King, 2015)

<u>Anatomy</u>: The sacroiliac complex is divided into an anterior synovial joint and posterior portion that is considered a syndesmosis. It includes the articulation between the sacrum and the ilium, the capsule that forms the sacroiliac joint proper, the ligaments that support this joint (anterior and posterior, including the anterior SI ligament, dorsal SI ligament, sacrospinous ligament, sacrotuberous ligament and interosseous ligaments), musculature that covers the joint, and the nerves that supply all of these. (Simopoulos, 2012) (Vleeming, 2012)

<u>Innervation</u>: Exact innervation of the joint and complex remains unclear. The anterior portion of the joint is thought to be innervated by branches of the lumbosacral trunk with no clear cut evidence of the involved nerves. Anterior innervation may also be supplied by the obturator nerve and superior gluteal nerve. The posterior portion is thought to be innervated by the posterior rami of L4-S3, although the actual innervation also remains unclear. Other research supports innervation by the S1 and S3 sacral dorsal rami. Myelinated and unmyelinated fibers along with encapsulated endings have been found in the joint. (Vallejo, 2006) (King, 2015) (Cox, 2014) (Roberts, 2014) (Vleeming, 2012) (Aydin, 2010) (Cohen, 2013) (Simopoulos, 2012) (Vanelderen, 2010) (Cohen, 2005)

<u>Etiology</u>: Suggested etiology of SI joint and SI complex pain includes degenerative joint disease, joint laxity, and trauma (such as a fall to the buttock). The main cause of actual SI joint disruption is significant pelvic trauma. Etiology of pain can also be classified into intra-articular causes (infection, arthritis, spondyloarthropathies, and malignancies) and extra-articular causes (enthesopathies, fractures, ligamentous injuries and myofascial pathology). Frequently no specific cause of SI joint and/or complex pain can be found.

<u>Differential Diagnosis</u>: The differential diagnosis of SI joint and/or complex pain includes spondyloarthropathy, lumbar nerve root compression, facet mediated pain, hip pain, myofascial pain and/or piriformis syndrome.

Imaging studies: These are not considered useful in identifying non-inflammatory pathology. The SI joint is notoriously difficult to read accurately. A significant complication is that the definition of the spectrum of radiographic abnormalities in the SI joint has received little attention in the literature. Sacroiliitis is suggested on MRI if bone marrow edema is clearly present and located in typical anatomic areas. Sacroiliac joint degenerative changes on imaging include sclerosis, joint space narrowing and osteophytosis. Currently proposed clinical discriminators performed poorly in correlating with radiographic changes in the SI joint. Minimal research is available to determine whether degenerative changes found in radiographs correlate as the primary cause of back pain. (Jans, 2014) (O'Shea, 2010) (Shibata, 2002) (Vallejo, 2006) (King, 2015) (Cox, 2014) (Roberts, 2014) (Vleeming, 2012) (Aydin, 2010) (Cohen, 2013) (Simopoulos, 2012) (Vanelderen, 2010) (Cohen, 2005) (van der Wurff, 2006) (Laslett, 2005) (Laslett, 2008) (Szadek, 2009) (Wong, 2012) (Bertholet, 2006) See also Sacroiliac injections, diagnostic; Sacroiliac injections, therapeutic; Sacroiliac radiofrequency neurotomy.

**Suggested physical examination indicators of pain related to sacroiliac joint pathology** (acknowledging the contradictory findings in current research):

- (1) The history and physical should suggest the diagnosis. Pain may radiate into the buttock, groin and entire ipsilateral lower limb, although if pain is present above L5, it is generally not thought to be from the SI joint.
- (2) There should be documentation of at least 3 positive exam findings to suggest the diagnosis. The five tests most recommended include the pelvic distraction test, pelvic compression test, thigh thrust test, FABER (Patrick's test) and Gaenslen's test.
- (3) Diagnostic evaluation must first address any other possible pain generators.

DECISION:	
	ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
	AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
	DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
	EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
	INTERQUAL CRITERIA
	MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
	MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
	MILLIMAN CARE GUIDELINES
$\boxtimes$	ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
	PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
	TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
	TEXAS TACADA GUIDELINES
	TMF SCREENING CRITERIA MANUAL
	PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
	OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE